

BOOS Workshop on Wave Forecasts and Air-Sea Interaction

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Copenhagen, Denmark

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<http://www.boos.org>

GOALS AND OBJECTIVES

To understand the current status and future challenges of the Baltic Sea wave forecasts, enhance wave data exchange and generate further co-operations among the Baltic partners. Topics will include wave modelling, calibration, operational forecasting, wave observing network, wave data assimilation, atmosphere-ocean wave coupling, low-high resolution coupling and key physical processes in wave modelling (e.g., limited fetch, shallow water and air-sea interaction etc.).

To plan further activities in the BOOS co-operation.

EXECUTIVE SUMMARY OF SCIENTIFIC / TECHNICAL RESULTS

The meeting made a consensus that a concerted action should be organized to enhance the Baltic cooperation on wave forecasts and therefore improve the wave prediction in the Baltic Sea. Heinz Guenther from GKSS and Jun She from DMI volunteered to be contact persons of this action. The concerted action will provide a platform for setting up common framework for member institutes to share workload in developing wave observing network, model calibrations, information exchange on technical issues of operational wave forecasts and results from research development. Detailed suggestions are as follows:

Wave observations: All institutes who have buoy measurements of waves are encouraged to contact Barry Broman at SMHI to add their data to BOOS wave page. 1-2 more buoys are suggested to be added in mid-south Baltic. Satellite data should be used for model verification. Data exchange should be enhanced. Wave observing network optimization is needed for both model validation and data assimilation.

Operational forecasts: WAMC4 is a common model used for the Baltic scale. Since different countries are using different data and periods for the WAM validation. It is necessary and possible to set up a common framework for the WAM validation. This include a common validation period, common observed wind/wave data base, a common set of resolutions and model-data model-model inter-comparison. Technical issues in improving wave prediction in the Baltic include parallelization, nesting, resolution selection, model validation and coupling methods etc.

Research development: on-going studies include wave-atmosphere-surge coupling, instant full coupling, fetch-limited waves, validation of sea surface roughness, depth refraction and sea spray effects. The new results from these studies can be reported and exchanged within the concerted action.

ONRIFO SPONSORED PARTICIPANTS

Summary of participants funded by ONRIFO.

Title / Name	Institution / Agency	Country
Jüri Elken	Estonian Marine Institute	Estonia
Tarmo Soomere	Estonian Marine Institute	Estonia
Uldis Bethers, Dr. Phys.	University of Latvia	Latvia
Yuriy Shishkin	Latvian Hydrometeorological Agency	Latvia
Inga Dailidienė	Centre of Marine Research	Lithuania
Ovidijus Stulpinas	Centre of Marine Research	Lithuania
A.Nekrasov	Russian State Hydrometeorological University	Russia
Nikolai Plink	Russian State Hydrometeorological University	Russia

SCIENTIFIC / STEERING AND ORGANIZING COMMITTEES

Steering Committee Members

Title / Name	Institution / Agency	Country
Dr. Erik Buch	Danish Meteorological Institute	Denmark
Dr. Hans Dahlin	Swedish Meteorological and Hydrographical Institute	Sweden
Kai Soetsje	BSH	Germany
Juha Marrku Leppanen	Finnish Institute of Marine Research	Finland
Juliusz Gajewski	Maritime Institute	Poland

Organizing Committee Members.

Title / Name	Institution / Agency	Country
Dr. Erik Buch	Danish Meteorological Institute	Denmark
Dr. Jun She	Danish Meteorological Institute	Denmark
Dr. Hans Dahlin	Swedish Meteorological and Hydrographical Institute	Sweden

SPONSOR INFORMATION

List of all conference sponsors.

Agency	Country
Baltic Operational Oceanography System -BOOS	Member State Contributions
Danish Meteorological Institute	Denmark
Office of Naval Research International Field Office	United States

PROCEEDINGS

[Link to BOOS Planning Meeting Minutes](#)

[Link to Wave Meeting Minutes](#)

[Link to Wave Meeting Abstracts](#) (alphabetical order)

SCIENTIFIC PROGRAM

[Link to Wave Meeting Agenda](#)

COUNTRIES REPRESENTED AND NUMBER OF PARTICIPANTS

List of countries participating.

Country (10)	Number of Participants (30)
Denmark	8
Estonia	2
Finland	2
Germany	2
Latvia	2
Lithuania	2
Poland	5
Russia	4
Sweden	2
United States	1

LIST OF PARTICIPANTS

[Link to Participants](#)